AMENDMENTS TO THE CLAIMS

1-33. (Cancelled)

34. (Currently Amended) A system for programming a packet-based network having ~~plural~~ a plurality of nodes for providing services to network subscribers, the system comprising:

a service creation tool operable to program a service definition package, said service definition package defining a plurality of packet processing behaviors;

a service control center interfaced with the packet-based network and operable to accept said service definition package for deployment to ~~predetermined~~ at least one network ~~nodes~~ node, said service control center comprising:

a first logic element operable to select one or more network processors for implementing said service definition package;

a second logic element operable to provide network processor-specific instructions and data to perform packet processing behaviors;

a third logic element operable to load said instructions and data into said one or more network processors;

a fourth logic element operable to monitor information from one or more network processors; and

a fifth logic element operable to utilize said information from said one or more network processors to report status information about said service definition package;

and

at least one network node interfaced with the network, the node having a network processor, the node operable to perform the one or more packet processing behaviors ~~translated from a network programming language~~.

35-46. (Cancelled)

47. (Currently Amended) A method for providing network services to subscribers using a programmable packet-based network having ~~plural~~ a plurality of nodes, at least one of said nodes having a network processor, said ~~node~~ nodes operable to perform one or more packet processing behaviors translated from a network programming language, the method comprising:

using a service creation tool to program a service definition package, said service definition package defining a plurality of packet processing behaviors; ~~and~~

using a service control center to accept said service definition package for deployment to network nodes on said packet-based network;

selecting one or more network processors for implementing said service definition package;

providing network processor-specific instructions and data to perform packet processing behaviors;

loading said instructions and data into said one or more network processors;

monitoring information from said one or more network processors; and

utilizing said information from said one or more network processors to report status information about said service definition package.

48 – 59. (Cancelled)

60. (New) The system of claim 34, wherein said fourth logic element performs said monitoring indirectly using a proxy function.

61. (New) The system of claim 35, wherein said proxy function utilizes an element manager function to provide access to information for said monitoring function.

62. (New) The system of claim 34, further comprising a sixth logic element operable to validate said network processors for implementing said service definition package.

63. (New) The system of claim 34, wherein a seventh logic element selects polling tasks used for said monitoring.

64. (New) The system of claim 34, wherein an eighth logic element summarizes status information obtained from said monitoring.

65. (New) The method of claim 47, further comprising: performing said monitoring indirectly using a proxy function.

66. (New) The method of claim 48, further comprising: utilizing an element manager function to provide access to information for said monitoring function.

67. (New) The method of claim 47, further comprising: validating said network processors for implementing said service definition package.

68. (New) The method of claim 47, further comprising: determining polling tasks used for said monitoring.

69. (New) The method of claim 47 further comprising: summarizing status information obtained from said monitoring